# ZoneFlex™ Lite Mesh Gateway

Smart Wi-Fi 802.11g High Performance Extender





High Performance Wi-Fi Extender for the Small and Medium Enterprise

The ZoneFlex Lite Mesh Gateway is the first long-range, high performance Wi-Fi system for easily extending signals in the absence of an Ethernet connection.

Working in concert with Ruckus ZoneFlex APs and functioning simultaneously as a high-gain Wi-Fi receiver and access point, the ZoneFlex Lite Mesh Gateway is the ultimate solution for hotels, public venues and small and medium businesses where there is limited IT staff and Ethernet cabling is not always pervasive.

Designed to solve difficult deployment issues and the nagging Wi-Fi problems of poor reach and erratic performance, the ZoneFlex Lite Mesh Gateway utilizes a state-of-the-art, high-gain smart antenna array technology called BeamFlex. This patented technology uniquely enables highly-reliable Wi-Fi signals that can be automatically steered around sources of interference in real time thereby dramatically improving user performance.

The ZoneFlex Lite Mesh Gateway is effortless to configure and installs in minutes – reducing the capital and labor cost of Ethernet cabling to additional APs needed to provide Wi-Fi services where no wiring exists.

After initial setup, simply plug the ZoneFlex Lite Mesh Gateways into a power outlet and they automatically connect to the best ZoneFlex access point using the most optimal Wi-Fi path available. It then repeats the wireless signal to local clients.

Finally industrial-strength Wi-Fi the way it was meant to be deployed: robust, easy-to-use and affordable.

# **BENEFITS**

# Enable stable Wi-Fi in the absence of Ethernet drops

Long-range wireless extender delivers reliable network connectivity and extends Wi-Fi signals to ares where Ethernet isn't available

# No RF experts required

Integrated directional smart antenna array automatically finds best signal with which to connect, eliminating AP placement issues and minimizing adjacent AP interference

# Reduces capital and labor costs

Eliminates the need to run Ethernet cabling to connect every AP

# **Extended coverage means fewer APs**

High-gain antennas dynamically combined to deliver two to four times Wi-Fi signal range for both transmitting and receiving

# Automatic interference avoidance

Wi-Fi signals are automatically steered around interference in real time to ensure high performance

### Simple, simple installation

After the quick start wizard configuration, simply plug the Ruckus Lite Mesh Gateway into a power socket, that's it

# **Automatic resiliency**

In the event of a lost connection, automatic failover to another wireless signal ensures the highest levels of network resilience

#### Reduced installation times

No disruptive cabling, site surveys or complex WLAN configuration

# ZoneFlex 2925 Lite Mesh Gateway

Smart Wi-Fi 802.11g Wi-Fi Extender

# Introducing the Ruckus ZoneFlex 2925 Lite Mesh Gateway

The Ruckus ZoneFlex 2925 Lite Mesh Gateway is a high-gain smart 802.11b/g gateway designed to solve two of the biggest problems facing Wi-Fi deployment: predictable signal coverage and extended reach. Weak signals that don't reach where you want and signals that constantly fluctuate causing poor performance are eliminated with the Ruckus ZoneFlex 2925 Lite Mesh Gateway. No longer must you run cables everywhere to allow for optimal AP placement. Just connect the ZoneFlex 2925 Lite Mesh gateway where you have power available and extend the coverage of your ZoneFlex wireless network to the entire floor.

Together with the Ruckus ZoneDirector central WLAN controller and the Ruckus ZoneFlex APs, the ZoneFlex 2925 Lite Mesh Gateway provides a plug-and-play experience with minimum operational overhead. The Ruckus ZoneFlex 2925 Lite Mesh Gateway is ideal for hotels, schools, airports and small-to-medium enterprises (SMEs) with little or no IT staff and a limited budget allowing you to deploy industrial strength wireless in minutes.

# High performance and cost effective

The ZoneFlex 2925 Lite Mesh Gateway implements Ruckus patented BeamFlex™ smart antenna technology that enables consistent, high performance, extended coverage and multimedia support as it automatically tunes itself to adapt to constant changes in the environment. This means fewer APs, more satisfied users, and a cost effective system that can be installed anywhere by non-wireless experts.

A Web-based wizard allows any computer user to configure ZoneFlex 2925 Lite Mesh Gateways creating a secure and sophisticated WLAN in a matter of minutes. Its superior coverage reduces the number of APs or gateways required by a factor of two or more, the Ruckus ZoneFlex 2925 Lite Mesh Gateway gives hot zone operators and SMEs the most cost-effective multimedia Wi-Fi solution. A true plug-and-play multimedia WLAN that is ready to us

# Part of the ZoneFlex Wireless LAN Family

The Ruckus ZoneFlex wireless system fills the gap between low end, feature-sparse consumer AP and expensive, complex enterprise-class WLANs. It is the first truly-affordable, centrally-managed 802.11g multimedia WLAN system specifically designed for hot zone operators and SMEs.

Working in concert with the ZoneDirector system, the Ruckus ZoneFlex APs deliver a complete, plug-and-play, secure and robust WLAN solution without the cost or complexity of high-end systems. The ZoneFlex 2925 Lite Mesh Gateway extends the range and coverage of the ZoneFlex wireless system without the need to run network cables to connect APs.



A simple to use wall mount kit allows the ZoneFlex 2925 LMG to be installed almost anywhere without having to run Ethernet cabling

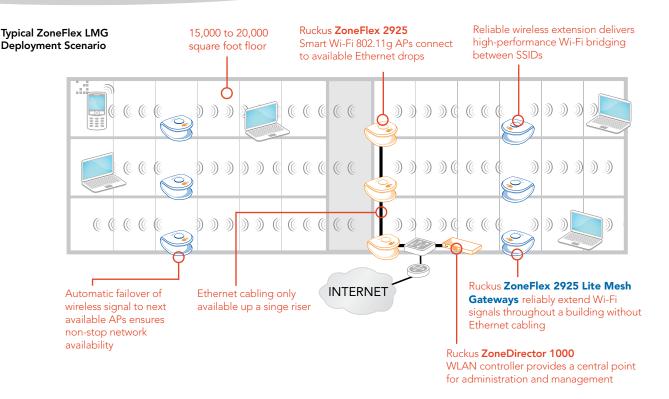


A state-of-the-art smart antenna array integrates multiple antenna elements to deliver high-gain, directional Wi-Fi signals to each client. This ensures unprecedented Wi-Fi reliability and predictable performance for any traffic type.

This enables up to 64 potential antenna combinations, up to 20 dB of interference rejection, up to 5 dBi signal gain and down to -100 dBm receive sensitivity thereby delivering unprecedented range extension and Wi-Fi signal reliability.

Expert control software selects the best antenna elements to use for any given packet at any given time to any given client based on changing environmental conditions.

# ZoneFlex 2925 Lite Mesh Gateway

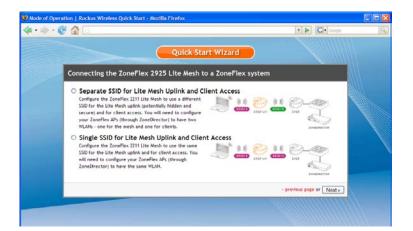


# IT "lite" deployment

The self-optimizing BeamFlex technology allows the Ruckus ZoneFlex 2925 Lite Mesh Gateway to be installed without site survey and RF planning. Simply power up any Ruckus ZoneFlex 2925 Lite Mesh Gateway, go through a 3-minute web wizard and the Lite Mesh gateway will automatically discover the Ruckus ZoneFlex APs and ZoneDirector.

# **ZoneDirector configuration (\* future)**

Used with the Ruckus ZoneDirector, the Ruckus ZoneFlex 2942 provides first-Ruckus ZoneFlex 2925 Lite Mesh Gateways are automatically configured by the Ruckus Zone-Director (\* future). A network of APs can be centrally configured in a matter of minutes through the ZoneDirector's web-based wizard.



# **FEATURES**

- Mesh to ZoneFlex APs
- Secure Mesh SSID in addition to client access SSID
- Integrated smart antenna array with 64 unique patterns
- Automatic interference avoidance optimized for high density environment
- Two to four-times extended range/ coverage
- 4 queues per station
- WEP, and WPA-PSK
- Ceiling or wall mountable with Kensington lock option

# **Specifications**

Physical Characteristics	
Power	<ul><li>External power adapter</li><li>Input: 110-240V AC</li><li>Output: 12V DC, 1A</li></ul>
Physical Size	• 14.2cm (L),12.2cm (W), 7.5cm (H)
Weight	• 200 grams
Antenna	<ul> <li>Internal software-configurable antenna array with directional and omni high-gain elements that provide up to 64 unique antenna patterns</li> </ul>
Ethernet Ports	• 5 ports, auto MDX, auto-sensing 10/100 Mbps, RJ-45
LED display	Power/status, Ethernet status, wireless status, wireless network quality indicator
Lock Option	Integrated Kennsington lock     (on mounting kit)
Environmental conditions	<ul> <li>Operating Temperature: 32°F (0°C)         <ul> <li>122°F (50°C)</li> </ul> </li> <li>Operating humidity: 15% - 95% non-condensing</li> </ul>

Performance and Supported Configurations		
Concurrent stations	<ul><li>Up to 50 (for open, Web or WPA-AES)</li><li>Up to 22 (for WPA-TKIP)</li></ul>	
Target UDP throughput	<ul> <li>15-20 Mbps (54 Mbps bursts) sustainable throughout a 5000 square foot (460m²) public area</li> </ul>	

RECEIVE SENSITIVITY		
802.11b		
1 Mbps	-99 to -108 dBm	
2 Mbps	-96 to -104 dBm	
5.5 Mbps	-91 to -98 dBm	
11 Mbps	-90 to -94 dBm	
802.11g		
6 Mbps	-93 to-96 dBm	
9 Mbps	-90 to -96 dBm	
12 Mbps	-90 to -94 dBm	
18 Mbps	-88 to -91 dBm	
24 Mbps	-85 to -88 dBm	
36 Mbps	-82 to -86 dBm	
48 Mbps	-78 to -81 dBm	
54 Mbps	-76 to -81 dBm	

# **Product ordering information**

Model	Description
901-2925-XX30	5-port 802.11g gateway

#### PLEASE NOTE:

 $\rm XX\textsc{-}$  When ordering you must specify the destination region by indicating -US  $\,$  -EU or -UK following the model number.

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Configuration	<ul> <li>Web user interface, CLI (Telnet), HTTP/S SSH, SNMP statistics interface</li> </ul>
Statistics	<ul> <li>LAN, wireless and associated stations</li> <li>Accessible via Web UI</li> </ul>
Software update	FTP or TFTP, remote auto available
Other utilities	<ul> <li>Configuration dump (admin only)</li> <li>Simple support info transfer to provider</li> </ul>
Standards Supported data rates	• 802.11b/g
Wi-Fi Standards Supported data rates	<ul> <li>802.11b/g</li> <li>54,48,36,24,18,12,11,5.5,2,1 Mbps</li> </ul>
Channels	<ul><li>US/Canada: 1-11</li><li>Europe (ETSI X30): 1-13</li><li>Japan X41: 1-13</li></ul>
Auto channel selection	<ul> <li>Supported</li> </ul>
RF power output	<ul> <li>23 dBm for wireless-B</li> <li>23 dBm for wireless-G</li> <li>Country-specific power settings are configurable</li> </ul>
Transmit power control	Supported
BSSID	• Two
Power Save	Supported
Certifications	FCC (U.S.), CE (EU), OFTA (Hong Kong)
Wireless Security	WEP, WPA-PSK, WPA-TKIP, WPA2-

AES

Authentication via 802.1X



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